MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)

FROM: John Mitnik, Chief District Engineer (SFWMD)

Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)

DATE: April 29, 2021

SUBJECT: Operational Position Statement for April 27, 2021 to May 3, 2021

This Position Statement is to provide operational recommendations for the one-week period from April 27, 2021 to May 3, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On April 26, Lake Okeechobee stage was 14.17 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Overall, Lake stage did not change during the preceding 7 days.

April District rainfall to date is above normal (131% of normal). Rainfall forecast (issued April 27) predicts below to near average rainfall for the coming 7-day period. Rainfall for the second 7-day period is expected to be near average.

<u>Precipitation Outlook:</u> The most recent CPC precipitation outlook for May 2021 for south Florida is for increased chances of above normal rainfall. The 3-month windows of May-Jul and Jul-Sep to Sep-Nov show increased chances of above-normal rainfall. The outlook for the 3-month widow of Jun-Aug calls for slightly increased chances of above normal rainfall south of Lake Okeechobee and increased chances of above normal rainfall for the lake and north. The outlook for the remainder of the 3-month windows from Oct-Dec and into 2022 is for equal chances of above-normal, normal, and below-normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, and the Multi-seasonal Lake Okeechobee Net Inflow Outlook in the Wet category, Part C of the 2008 LORS suggests "Up to Maximum Practicable Releases to WCAs if desirable or with minimum Everglades Impact; otherwise no releases to the Everglades".

Over the 7-day period from April 19, 2021 to April 25, 2021, regulatory releases in the amount of 2,200 acre-feet were sent from Lake Okeechobee to STA-2 and 2,200 acre-feet to the A-1 FEB-STA-3/4 Complex. No releases were sent from the Lake Okeechobee to the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is above schedule (Zone A1), stage in WCA-2A is above schedule (Zone A), and WCA-3A stage is below schedule (Zone B). For the coming operational period, the USACE is requesting maximum practical regulatory releases be sent south from Lake Okeechobee towards the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band, the Tributary Hydrologic Conditions falling in the Normal category, the Seasonal and the Multi-seasonal Lake Okeechobee Net Inflow Outlooks in the Wet and Very Wet categories respectively, Part D of the 2008 LORS suggests "S-79 up to 3,000 cfs and S-80 up to 1,170 cfs".

For the 7-day period April 19, 2021 to April 25, 2021, total discharge to the St. Lucie Estuary was around 450 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the good range for adult oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 1,300 cfs over the past week with nearly 450 cfs coming from Lake Okeechobee. Salinity conditions are in the good range for Tape Grass at Val I-75 and at Ft. Myers. Salinity conditions for adult eastern oysters are in the good range at Shell Point and Cape Coral and in the fair range at Sanibel. Additionally, Karenia brevis was observed off the mouth of the Caloosahatchee Estuary at background to low concentrations, and background to low concentrations in Collier County.

The District will continue to work with the USACE to manage Lake Okeechobee levels in an effort to curtail harmful discharges over this year. Generally speaking, the District and Corps should strive to move as much water out of the lake without harming natural resources and other critical resources. At this time, this involves releases that maintain appropriate salinity in the estuaries and ensuring the Stormwater Treatment Areas don't sustain long term damage from extended high volume flows. Current District operational objectives are to move approximately 700 cfs south from Lake Okeechobee, in addition to water supply needs, for delivery to the Everglades.

Given the seasonal forecast for south Florida, and current lake levels, the District recommends USACE continue non-harmful lake discharges in an effort to manage lake stage while continuing to monitor lake and estuary conditions and make any adjustments as necessary. This decision should be reassessed as needed based on lake and estuarine conditions. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.